Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1. (Currently amended) A rotary weight filler comprising a plurality of filling ~~means~~devices which are disposed along ~~the~~an outer periphery of a revolving body at an equal circumferential spacing, a filling valve for opening or closing a filled liquid passage which is formed in each of the filling ~~means~~devices, a plurality of weight measuring ~~means~~devices mounted on the revolving body in a manner corresponding to the filling ~~means~~devices, and a ~~control means~~controller for controlling the opening or closing of a corresponding filling valve in response to a signal from the corresponding weight measuring ~~means~~device, thereby filling a given quantity of liquid into a vessel ~~supplied~~;

wherein the operation is selectively changed between a first operational mode where a filling operation takes place after measuring the tare of the vessel and a second operational mode where a filling operation takes place without measuring the tare of a vessel, and whenever the second operational mode is selected, the value of the tare which is measured during the first operational mode is regarded as the tare of ~~a~~each vessel supplied during the second operational mode and the filling operation is initiated at a point upstream of a point where the filling operation is initiated during the first operational mode.

2. (Currently amended) A rotary weight filler according to Claim 1 ~~in which~~, wherein the operation is initiated in the first operational mode, and after a reference

value ~~which is~~ calculated from the measured tare is regarded as representing the tare of the vessel for ~~purpose of~~ the filling operation, the operation is switched to the second operational mode, and after a given time interval, the filler is again operated in the first operational mode to recalculate the reference value for the tare.

3. (Currently amended) A rotary weight filler according to Claim 2 ~~in which~~, wherein the reference value for the tare is a mean value of measured values.

4. (Currently amended) A rotary weight filler according to Claim 2 ~~in which~~, wherein the reference value of the tare is one of the measured values which appears with a highest frequency.

5. (Currently amended) A rotary weight filler according to Claim 2 ~~in which~~, wherein the reference value for the tare is a median value in a queue of measured values arranged in an ascending or descending order.

6. (Currently amended) A rotary weight filler according to Claim 1 ~~in which~~, wherein in the first operational mode, the tare of ~~the~~each vessel is measured after the attitude of ~~a~~the vessel supplied has become stabilized and after the weight measuring ~~means~~device has become stabilized.

7. (Currently amended) A rotary weight filler according to Claim 1 ~~in which~~, wherein in the second operational mode, a fill initiate command signal is delivered to initiate a filling operation after ~~the~~an attitude of ~~a~~the vessel supplied has become stabilized.

8. (Currently amended) A rotary weight filler

according to Claim 1~~ in which~~, wherein in the second operational mode, a fill initiate command signal is delivered before ~~the~~an attitude of the vessel supplied becomes stabilized, and the filling operation is initiated after the attitude of the vessel has become stabilized.

9. (New) A rotary weight filler apparatus for receiving and filling vessels with a given quantity of liquid comprising:

a revolving body;

a plurality of filling devices circumferentially spaced and disposed along an outer periphery of the revolving body, each said filling device including a filling valve for opening or closing a corresponding filled liquid passage and a nozzle connected to a corresponding said filling valve for outputting a liquid;

a plurality of weight measuring devices mounted about the outer periphery of the revolving body, each said weight measuring device corresponding to one of said plurality of filling devices and adapted to receive a vessel thereon; and

a controller controlling in a first operating mode to open a corresponding said filling valve after a first predetermined time that corresponds to the sum of 1) a vessel stabilization time zone needed for a vessel to stabilize after placement onto the weight measuring device, 2) a load cell stabilization time zone needed for a weight measuring device to stabilize after placement of a vessel thereon, and 3) a tare measuring time zone required for completing measurement of the weight of a vessel by the corresponding weight measuring device, and said controller controlling closing said corresponding filling valve in response to a signal from the corresponding weight measuring device,

wherein the controller determines a reference value for the tare of each corresponding vessel determined during the first operating mode, and

said controller controlling in a second operating mode to open the corresponding said filling valve after a second predetermined time that corresponds to the sum of 1) the vessel stabilization time zone and 2) the load cell stabilization time zone, so that the second operating mode begins initial filling of each corresponding vessel without measuring the tare of a corresponding vessel, said second predetermined time being less than said first predetermined time, and said controller closing the corresponding filling valve in response to a signal from the corresponding weight measuring device.

10. (New) The rotary weight filler according to Claim 9, wherein in the second operating mode said filling valve operates at a lower filling rate than in the first operating mode.

11. (New) The rotary weight filler according to Claim 9, wherein the controller automatically periodically transfers from the second operating mode to the first operating mode after a second operating mode predetermined time interval to again determine the reference value for the tare of a corresponding vessel.

12. (New) The rotary weight filler according to Claim 11, wherein the reference value for the tare comprises a mean value of measured values during a first operating mode time interval.

13. (New) The rotary weight filler according to Claim 11, wherein the reference value for the tare comprises the

measured value that occurs the most times during a first operating mode time interval.

14. (New) The rotary weight filler according to Claim 11, wherein the reference value for the tare comprises a median value of the measured values that occur during a first operating mode time interval.